

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No. : 10/790,371 Confirmation No. 9364  
Applicant : Nitin Desai  
Filed : March 1, 2004  
TC/A.U. : 2154  
Examiner : Chang, Jungwon  
Docket No. : 5853-426

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DECLARATION UNDER 37 C.F.R. § 1.131

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Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Abdelsalam Helal, a citizen of the United States, residing in Gainesville, Florida, hereby declare and state as follows:

1. I was employed by the University of Florida of Gainesville, Florida ("UF"), at the time the above-identified application was conceived. I make this declaration in support the above-identified application.
2. The University of Florida invests substantial time and effort into the research, development, and marketing of its products, and in an effort to protect its rights in all new inventions, UF requests that all employees prepare and submit confidential Invention Disclosure Forms upon conception by the inventor(s).
3. As a named co-inventor for this invention, I and my co-inventors prepared and submitted the attached Confidential Invention Disclosure pursuant to UF's guidelines.
4. The Confidential Invention Disclosure was originally submitted for consideration to UF's Office of Technology Licensing for preparation of a patent application on April 9, 2003. The disclosure represents a fully conceived and workable invention as written. I reviewed the claims of the above-mentioned patent application prior to submission of the application to assure the claimed invention was fully supported by the disclosure in light of the invention disclosure and art known at the time of the disclosure.

*aa h*

5. Following the submission of Confidential Invention Disclosure, I diligently worked with UF's Office of Technology Licensing and outside counsel to prepare and file a US non-provisional application on March 1, 2004.

6. I make this Declaration to establish that my co-inventor and I conceived of the present invention at least as early as April 9, 2003, and exercised due diligence from that date to the filing of the provisional application for the above-referenced invention.

7. I further declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the above-identified patent application or any patent issuing thereon.

  
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ABDELSALAM HELAL

Date: October 8, 2008

  
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Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Verma Varun, a citizen of India, residing in Coral Springs, Florida, hereby declare and state as follows:

1. I was employed by the University of Florida of Gainesville, Florida ("UF"), at the time the above-identified application was conceived. I make this declaration in support the above-identified application.

2. The University of Florida invests substantial time and effort into the research, development, and marketing of its products, and in an effort to protect its rights in all new inventions, UF requests that all employees prepare and submit confidential Invention Disclosure Forms upon conception by the inventor(s).

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Varun Varma  
VERMA VARUN

Date: 10/07/08

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DECLARATION UNDER 37 C.F.R. § 1.131

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Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Nitin Desai, a citizen of India, residing in Coconut Creek, Florida, hereby declare and state as follows:

1. I was employed by the University of Florida of Gainesville, Florida ("UF"), at the time the above-identified application was conceived. I make this declaration in support the above-identified application.

2. The University of Florida invests substantial time and effort into the research, development, and marketing of its products, and in an effort to protect its rights in all new inventions, UF requests that all employees prepare and submit confidential Invention Disclosure Forms upon conception by the inventor(s).

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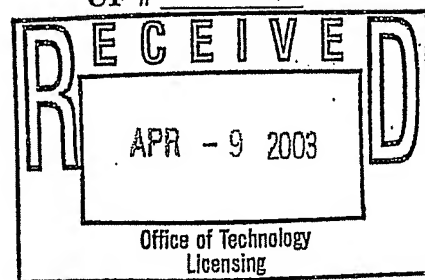
  
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NITIN DESAI

Date: 10/7/08

5853-426

UF # 11204

**CONFIDENTIAL**  
**INVENTION DISCLOSURE**



**1. Disclosure of Invention**

An invention includes any discovery, new and useful process, composition of matter, article of manufacture, know-how, design, model, technological development, biological material, strain, variety, culture of any organism, or portion, modification translation, or extension of these items, and any mark used in connection with these items. Under patent law, this may include drugs, newly discovered, mutated or genetically engineered microorganisms or plants, new or altered forms of plant life, vaccines, cells, tissue and organ cultures, products of recombinant DNA research, hybrid cell cultures, processes involving microorganisms, monoclonal and polyclonal antibodies, engineered proteins, and some computer programs and designs.

A. **TITLE:** Konark – A Service Discovery and Delivery Protocol for Ad-Hoc Networks

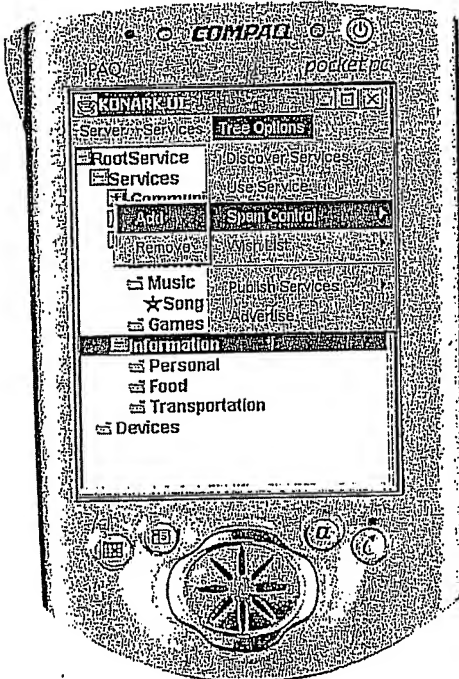
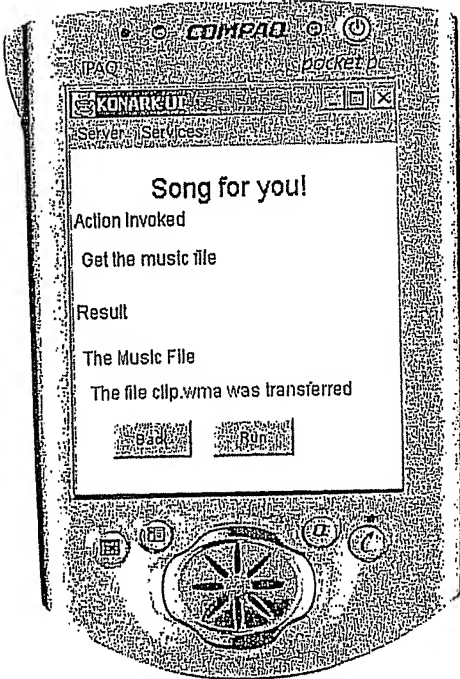
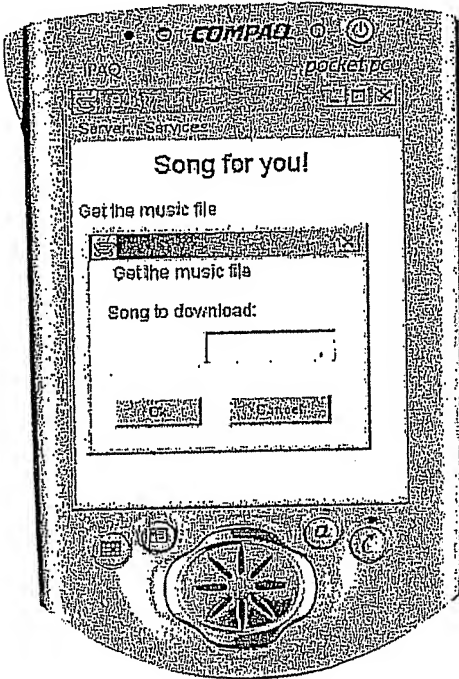
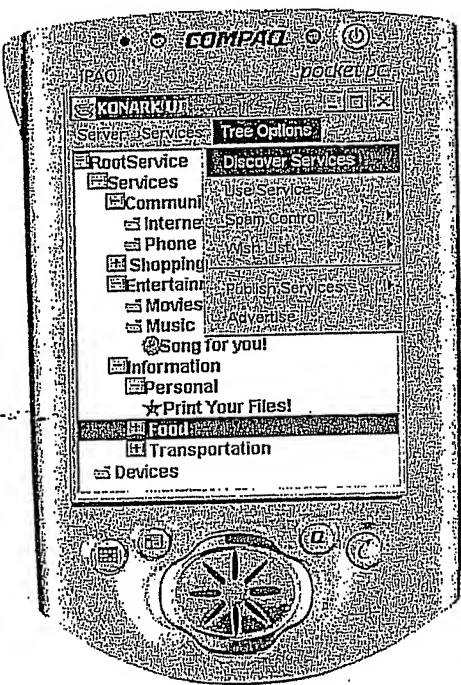
**B. CONCISE DESCRIPTION OF THE INVENTION**

1. The disclosure should enable someone having knowledge of the field to understand the invention. Include essential elements (features, concepts, or new results of the invention, whichever is most applicable), their relationship to one another, and their mode of operation. Identify the elements that are considered novel.

Konark enables the discovery and delivery of m-commerce oriented software services in ad-hoc networks. Services could be personal resources (songs, files, pictures, games, etc.) or some form of information (personal career profile, local weather, available restaurants, etc.). Konark defines an XML based service description language that enables a wide variety of services to be packaged as services. It defines certain APIs that enable in the discovery, advertisement and usage of these packaged services. Konark architecture includes a micro-HTTP server that enables service delivery using open standards like SOAP. The entire architecture has been developed considering requirements and limitations of ad-hoc networks and handheld devices. The complete approach is peer-to-peer, requiring no centralized repositories. Konark thus succeeds in establishing a platform for m-commerce oriented programming paradigm.

2. If the invention is an apparatus or system, attach drawings or a sketch and indicate if it has ever been built or tested. Use additional pages, attach drawings, manuscripts, papers, or other supporting material to facilitate understanding the invention. Attach any data which shows that the invention works.

The following pictures are screen-shots of a sample application developed using Konark APIs. This application was developed for Personal Java specification, and tested on Compaq iPAQs running Jeode VM from Insignia.





The following graphs show performance characterization obtained from benchmarking experiments.

